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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,116	04/13/2004	Tomonari Itou	FP04-017US	6449
1218	7590	02/23/2005	EXAMINER HARVEY, JAMES R	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			ART UNIT 2833	PAPER NUMBER

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,116

Applicant(s)

ITOU ET AL.

Examiner

James R. Harvey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-13-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

- The Information Disclosure statement(s) and related documents that were filed on 4-13-04 have been considered.

Priority

- Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

- The drawings are objected to because the cross-hatching is improper. See MPEP 608.02.

For example, portions of the drawings in section and made of an insulated material must be crosshatched with alternating thick and thin lines, not with just thin lines.

- Please note that drawing corrections will no longer be held in abeyance. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application.
- If drawing correction are not submitted with the response to this office action, the response will be consider a Non-Responsive Reply and the following paragraph will apply:

The reply filed on (...) is not fully responsive to the prior Office Action because: (...)
Since the period for reply set forth in the prior Office action has expired, this application will become abandoned unless applicant corrects the deficiency and obtains an extension of time under 37 CFR 1.136(a).

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

Claim Objections

- Claim(s) 1-7 is/are objected to because of the following informalities:
 - In reference to Claim(s) 1, it is objected to because it is not clear as to what location the lock 30 is required to be positioned along the trace of displacement¹ when the angle is obtuse with respect to the insertion direction because the angle changes with respect to the insertion direction as the lock 30 pivots about the pivot axis of it's arm. For purposes of examination, it is assumed that the language is intended to be so broad as to allow for any possible location about the pivot axis of the lock's arm. An examination based on the merits, as best understood, is addressed below.
 - In reference to Claim(s) 7, the recitation "greater angle of inclination than the angle of inclination" is seen to be a typographical error. For purposes of examination, it is assumed that the language is intended to be "greater angle of inclination than the obtuse angle". An examination based on the merits, as best understood, is addressed below.
 - Appropriate response to the above is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

¹ As described on page 10, line 13 and figure 12 of Applicant's disclosure.

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- Claim(s) 5 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-- In reference to Claim(s) 5, the recitation “an end of the locking surface (32) closer to the terminal fitting (10) is more distanced than the engaging portion (16A) of the terminal fitting (10)” is vague and indefinite because the engaging portion (16A) is seen to an element of the terminal fitting (10) and the recitation does not define what element that it is “more distanced” from.

-- In reference to Claim(s) 5, the recitation “an angle of inclination” is vague and indefinite because the “angle of inclination” of claim 5 is represented by the Greek letter alpha and the “obtuse angle” introduced in claim 1 is also represented by the Greek letter alpha. It is not clear if they are the same angle or different angles.

-- Due to the two above indefiniteness issues, claim 5 can not be further examined on the merits.

-- Appropriate correction of the above is required.

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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** Claim(s) 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bonavita et al. (6478620).

-- In reference to Claim(s) 1, Bonavita shows (figure 2)

a housing 12 with at least one cavity 20 for receiving at least one terminal fitting 36 (cover sheet),

a resiliently displaceable lock (24; (figure 2)) provided on an inner wall of the cavity 20,

the lock 24 being configured for being resiliently displaced by the terminal fitting 36 during insertion of the terminal fitting 26 into the cavity 20 along an inserting direction (the direction parallel with the centerline 18 (figure 2)),

the lock 24 resiliently returning when the terminal fitting 26 is inserted a specified distance into the cavity 20 so that a locking surface 24b of the lock 24 engages an engaging portion (adjacent 24b; (cover sheet)) of the terminal fitting 26 for locking the terminal fitting 26 so as not to come out,

the locking surface 24b of the lock 24 being slanted to form an obtuse angle (a) with respect to the inserting direction (see examiner's figure).

-- In reference to Claim(s) 2, Bonavita shows a retainer (near the lead line of numeral 38; figure 9) for entering a deformation space (figures 2 and 4) for the lock 24 to prevent the resilient displacement of the lock 24.

-- In reference to Claim(s) 3, Bonavita shows the retainer 38 includes at least one pushing portion 38 for engaging the lock 24 to displace the lock 24 towards the terminal fitting 26 upon entering the deformation space (figures 2 and 4).

-- In reference to Claim(s) 4, Bonavita shows means (the notch near lead line on figure 2) for holding the retainer at a first position where the retainer is retracted (figure 2) from the deformation space to permit the resilient displacement of the locking and at a second position (figure 4) where the retainer is located in the deformation space.

** Claim(s) 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamanashi (5839921).

-- In reference to Claim(s) 1, Yamanashi shows (cover sheet and figure 3C)

a housing 1 with at least one cavity 2 for receiving at least one terminal fitting 3,

a resiliently displaceable lock 5 provided on an inner wall of the cavity 2, the lock 5 being configured for being resiliently displaced by the terminal fitting 3 during insertion of the terminal fitting 3 into the cavity 2 along an inserting direction (transverse to direction "x" (cover sheet)),

the lock 5 resiliently returning when the terminal fitting 3 is inserted a specified distance into the cavity 2 so that a locking surface (near the lead line of numeral P2 (figure 3C)) of the

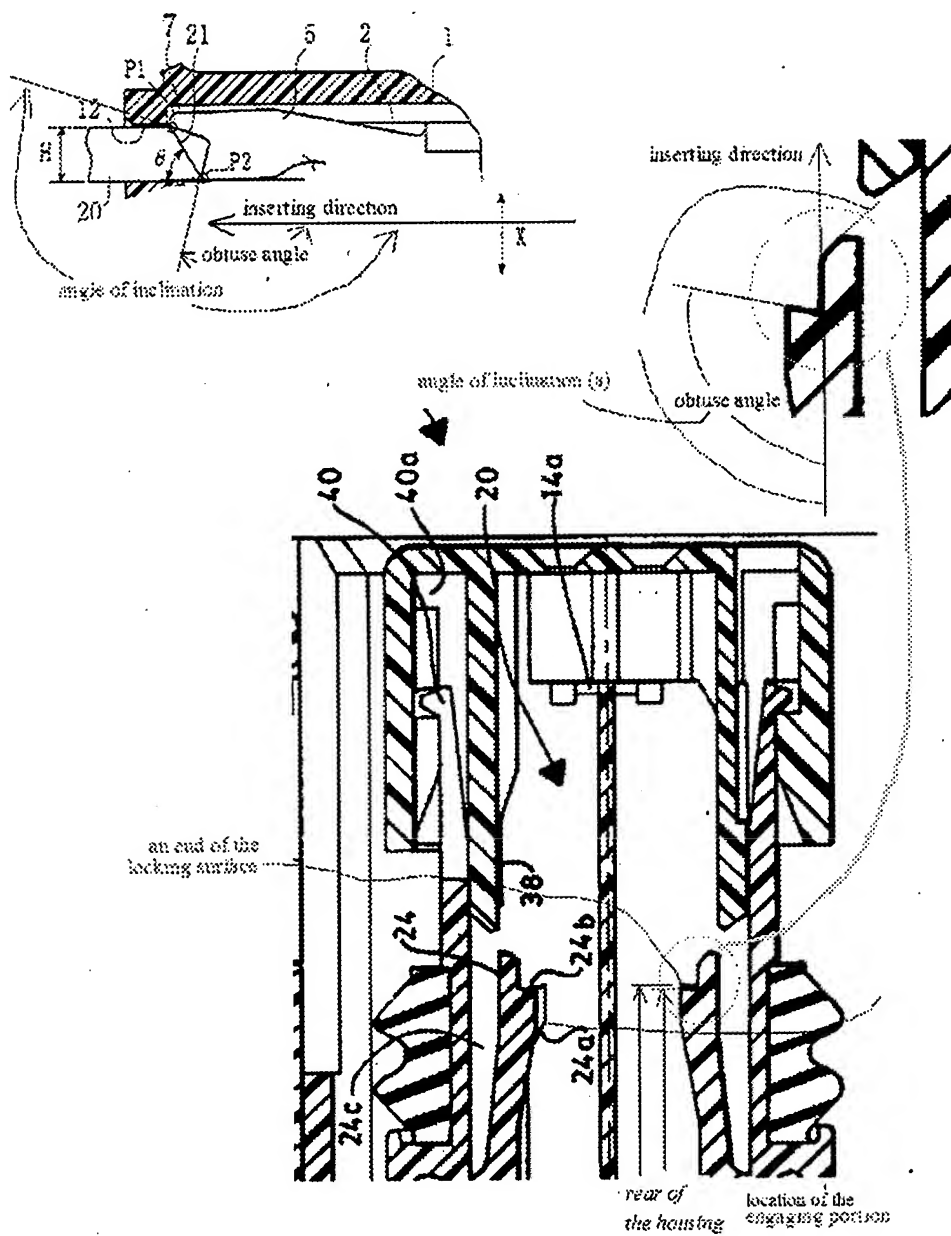
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lock 5 engages an engaging portion 4 (cover sheet) of the terminal fitting 3 for locking the terminal fitting 3 so as not to come out,

the locking surface (near the lead line of numeral P2 (figures 3C)) of the lock 5 being slanted to form an obtuse angle (see examiner's figure) with respect to the inserting direction.

-- In reference to Claim(s) 6, Yamanashi shows the lock 5 has a disengagement operable portion (near the lead line of numeral P1 (figure 3B) for engaging a disengagement jig 20 inserted into the housing 1.

-- In reference to Claim(s) 7, Yamanashi shows the disengagement operable portion (near the lead line of numeral P1 (figure 3B) is inclined with respect to the inserting direction and has a greater angle of inclination than the angle of inclination of the locking surface (near the lead line of numeral P2 (figure 3C)).



Conclusion

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Effective May 1, 2003, the United States Patent and Trademark Office has a new Commissioner for Patents address. Correspondence in patent related matters must now be addressed to:

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

For additional information regarding the new address, see Correspondence with the United States Patent and Trademark Office, 68 Fed. Reg. 14332 (March 25, 2003).

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- The prior art listed on PTO form 892 that is made of record and not relied upon is considered pertinent to applicant's disclosure because it shows the state of the art with respect to applicant's claimed invention. In particular reference to Ichida et al. (6824428) and Tanaka (6682366), they both show an obtuse angle that is seen to be relevant to applicant's claimed invention.

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Harvey whose telephone number is 571-272-2007. The examiner can normally be reached on 8:00 A.M. To 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800 extension 33.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2800.

- Effective **October 1, 2003**, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, **(703) 872-9306**, with a few exceptions. *See Fax Automation in Technology Center 1700, 1237 Off. Gaz. Pat. Office* 140 (August 29, 2000). Replies to Office actions including after-final amendments that are transmitted by facsimile must be directed to the central facsimile number. Unofficial

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correspondence such as draft proposed amendments for interviews may continue to be transmitted by facsimile to the Technology Centers.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James R. Harvey, Examiner

jrh

February 21, 2005

A handwritten signature in black ink, appearing to be 'JRH' followed by a stylized flourish, is written over a horizontal line.